
Weekly Report / MEI Honghui

4.24-4.30

Survey Writing

Thought of categorizations in several different aspects.

Degree of Abstraction

None, Graphic Library, Declarative, Chart Typology.

Interactivity of IDE

Programming, DSL, Control Panel, Drag-n-drop, By Demonstration.

Automaticity

Descriptive, Predictive, Prescriptive?

("Towards a general-purpose query language for visualization recommendation")

Level of Customization

Dataflow(Visflow), Chart Type(Flexible Axes), Infographic Design(DDG), All(VEGA).

Data Type(Structure) Supported

Table data, Hierarchical, Streaming

Targeted Audience

Analyst, Designer, Normal

Interaction to Specified

Fixed, Basic, Linked, Custom

Operation Method

Standalone, Plugin, Reverse-engineering

Bottom-up and Top-down

Uncategorized

Iterating Between Tools to Create and Edit Visualizations

Wrangler: Interactive Visual Specification of Data Transformation Scripts

Side Topics

Pipeline

Research on Users (Novices, Beyond the Desktop, Cognitive)

Narrative

Mixed-initiative

Paper Reading

Progressive Visual Analytics

- [1] J. Fekete, "ProgressiVis : a Toolkit for Steerable Progressive Analytics and Visualization," Vis. 1st Work. Data Syst. Interact. Anal. Oct 2015, Chicago, United States., 2015.
- [2] D. Fisher, I. Popov, S. M. Drucker, and M. Way, "Trust Me, I'm Partially Right: Incremental Visualization Lets Analysts Explore Large Datasets Faster," in Proceedings of the SIGCHI conference on Human factors in computing systems, 2012, pp. 1673–1682.
- [3] C. D. Stolper, A. Perer, and D. Gotz, "Progressive visual analytics: User-driven visual exploration of in-progress analytics," IEEE Trans. Vis. Comput. Graph., vol. 20, no. 12, pp. 1653–1662, 2014.

Others

- [4] S. Malik, F. Du, M. Monroe, E. Onukwugha, C. Plaisant, and B. Shneiderman, "Cohort Comparison of Event Sequences with Balanced Integration of Visual Analytics and Statistics," Proc. 20th Int. Conf. Intell. User Interfaces - IUI '15, pp. 38–49, 2015.

Statistics is integrated with visual encodings for users to choose and observe on data metrics of interests.

- [5] L. Micallef, G. Palmas, A. Oulasvirta, and T. Weinkauff, "Towards Perceptual Optimization of the Visual Design of Scatterplots," IEEE Trans. Vis. Comput. Graph., no. June, pp. 1–1, 2017.

PVis paper. Define and measure the quality of scatterplots. May be used in automatic recommendation systems.

- [6] J. Heer and M. Agrawala, "Software Design Patterns for Information Visualization," vol. 12, no. 5, pp. 853–860, 2006.

Talk about infoVis designs from a view of software engineering. Reveals the hidden parts and patterns of infoVis systems.